

**HIGHER TECHNICAL INSTITUTE**

**ELECTRICAL ENGINEERING  
DEPARTMENT**

**DIPLOMA PROJECT**

**DESIGN OF THE ELECTRICAL  
SERVICES OF A MULTISTOREY  
BUILDING**

**E.1336**

**ANDREOU PANAGIOTIS**

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# DESIGN OF THE ELECTRICAL SERVICES OF A MULTISTOREY BUILDING

Project report submitted by:

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# SUMMARY

This project "DESIGN OF THE ELECTRICAL SERVICES OF A MULTISTOREY BUILDING" deals with the electrical installation of a block of flats.

The project consists of fifteen chapters.

In chapter one, it deals with the lighting design of the building.

The second chapter has to do with the socket outlet circuits design.

The third chapter is for the cooker circuits design.

In chapter four the water heater circuits calculations are included.

Chapter five deals with the storage equipment circuits.

Next chapter, chapter six has to do with the air condition circuits design.

Storage heaters calculations is done in chapter seven.

Chapter eight includes the common uses circuits design.

Chapter nine deals with the diversity.

Chapter ten deals with the calculations of the size of the live conductors of the main circuits.

Chapter eleven explains how the earthing arrangement of the building is to be done.

Lightning protection system design is done in chapter twelve.

Chapter thirteen includes the telephone installation of the building.

Finally chapter fourteen includes the costing calculations.



# INTRODUCTION

The purpose of this project is to design the complete electrical installation of a Multistorey Building which includes the following:

- (i) power
- (ii) lighting
- (iii) telephone and TV distribution
- (iv) lightning protection

Although you have to study the electrical installation engineering work and to take into account the IEE Wiring Regulations sixteenth edition and CYTA requirements.

This installation is design to protect: (i) persons, (ii) property and (iii) livestock.

The requirements were taken into account relate to protection against: (i) electric shock, (ii) fire, (iii) burns and (iv) injury from mechanical movement of electrically actuated equipment.